

AMENDMENTS TO THE CLAIMS

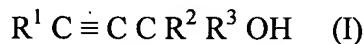
This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-23 (Canceled)

24. (New) An anti-corrosion and anti-metal sulfide scale formulation for use in the treatment of corrosion and metal sulfide scale deposits in aqueous systems, said formulation comprising a THP^+ salt and a primary, secondary or tertiary alcohol having an acetylenic bond in the carbon backbone.

25. (New) The formulation as claimed in Claim 24, wherein the acetylenic bond is adjacent to the hydroxyl group, said alcohol having the general formula (I):



wherein:

R^1 , R^2 and R^3 being the same or different, each independently represent hydrogen, C_1 to C_8 alkyl or functionally-substituted alkyl.

26. (New) The formulation as claimed in Claim 25, wherein R^1 , R^2 and R^3 each independently represent hydrogen or C_1 to C_8 alkyl.

27. (New) The formulation as claimed in Claim 26, wherein the alcohol is propargyl alcohol.

28. (New) The formulation as claimed in Claim 24 wherein the metal sulfide scale is iron sulfide, lead sulfide or zinc sulfide.

29. (New) The formulation as claimed in Claim 24, wherein the THP⁺ salt comprises an anion selected from the group consisting of sulphate, chloride, phosphate, bromide, fluoride, carbonate, citrate, lactate, tartrate, borate, silicate, formate and acetate.
30. (New) The formulation as claimed in Claim 24, further comprising a surfactant.
31. (New) The formulation as claimed in Claim 30, wherein the surfactant is a cationic surfactant.
32. (New) The formulation as claimed in Claim 31, wherein the cationic surfactant is selected from the group consisting of quaternary ammonium compounds, N-alkylated heterocyclic compounds, quaternised amido-amines, and amino methane phosphonates.
33. (New) The formulation as claimed in Claim 30 wherein the surfactant is selected from the group consisting of anionic, amphoteric and non-ionic surfactants.
34. (New) The formulation as defined in Claim 24 for treating corrosion of mild steel, copper or aluminum.
35. (New) (New) A method for the treatment of an aqueous system containing or in contact with a metal sulfide scale while concomitantly inhibiting the corrosion of surfaces in contact with said aqueous system, said method comprising the step of adding to said aqueous system a scale and corrosion inhibiting amount of a formulation as defined in Claim 24.
36. (New) The method according to Claim 35 wherein the aqueous system is used in enhanced oil recovery.

37. (New) The method as claimed in Claim 35 wherein the aqueous system is used in industrial water systems or paper manufacturing systems.
38. (New) The method as claimed in Claim 35 wherein the THP⁺ salt is added to the aqueous system in an effective amount of up to 30% by weight.
39. (New) An anti-corrosion and anti-metal sulfide scale formulation consisting essentially of the reaction product of a THP⁺ salt and a primary, secondary or tertiary alcohol having an acetylenic bond in the carbon backbone with a ratio of said THP⁺ salt and said acetylenic alcohol of between 1:1 and 750:1.
40. (New) The formulation as claimed in Claim 24, having a ratio of the THP⁺ salt to the acetylenic alcohol of between 1:1 and 750:1.
41. (New) The formulation as claimed in Claim 40 wherein the ratio is between 15:1 and 300:1.
42. (New) The formulation as claimed in Claim 41 wherein the ratio is about 40:1.